Nye County
Nuclear Waste Repository Project Office
2101 E. Calvada Blvd., Ste. #100 · Pahrump, Nevada 89048
(775) 727-7727 · Fax (775) 727-7919

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December 28, 2012

Cindy Bladey, Chief
Rules, Announcements, and Directives Branch,
Office of Administration
Mail Stop: TWB-05-B01M
U.S. Nuclear Regulatory Commission (NRC)
Washington, DC 20555-0001

Subject: Docket ID NRC-2012-0246, Scoping for the Waste Confidence Environmental Impact Statement (EIS)

Dear Ms. Bladey:

The Nye County, Nevada Nuclear Waste Repository Project Office (NWRPO) appreciates the opportunity to provide scoping comments on the NRC proposed Waste Confidence EIS. Our comments, in large part, reiterate points made to NRC staff in previous comments made by the NWRPO on previous related matters. In particular, these include: comments made by the NWRPO in our November 25, 2008 letter to the NRC regarding the "Update and Proposed Revision to the Waste Confidence Decision" (Reference 1); and comments made by the NWRPO in our February 16, 2012 submittal to the NRC staff regarding the NRC Draft Report for Comment, Background and Preliminary Assumptions for and Environmental Impact Statement – Long-Term Waste Confidence Update, December 2011" (Reference 2). These are appended in their entirety and made part of these comments for consideration in the current EIS scoping considerations. Additionally, we note that comments made by the Science Committee of the Sustainable Fuel Cycle Task Force to the NRC staff dated February 17, 2012 regarding the NRC Draft Report for Comment, Background and Preliminary Assumptions for an Environmental Impact Statement – Long-Term Waste Confidence Update, December 2011" (Reference 3), echo and complement our comments.

Background for NWRPO Comments

The NRC staff, in webinars requesting scoping comments for the subject EIS, stated that "Waste Confidence is

- A generic environmental analysis
- A generic determination that fuel can be stored safely until a repository becomes available"

The need for Waste Confidence stems from a 1979 decision by the U.S. Court of Appeals for the District of Columbia Circuit (in Minnesota v. NRC). NRC states in its, "Draft Report for Comment, Background and Preliminary Assumptions For an Environmental Impact Statement – Long-Term Waste Confidence Update" (Reference 4), the following background information.

"In that decision, the court directed the NRC to determine whether a disposal solution for spent fuel would be available by the time a reactor's operating license expires and, if not, to determine whether the spent fuel could be safely stored after that date.

As a result of the court order NRC published its first Waste Confidence decision and findings in 1984. That decision and subsequent rule depended on the existence of a geologic repository for the ultimate disposal of high-level radioactive waste. When it became obvious that the time frame for geologic repository development associated with the first Waste Confidence decision could not be met, NRC updated its Waste Confidence decision and rule in 1990. In 1999 the NRC reviewed and reaffirmed the 1990 Waste Confidence decision and rule. Beginning in 2006 the NRC was concerned that the time frame for geologic disposal in the 1990 Waste Confidence decision could not be met, thus leading to the 2010 Waste Confidence decision. The following summary from Reference 4 states the 2010 Waste Confidence findings.

The findings from the current [2010] Waste Confidence decision are listed below, and the current Waste Confidence rule reflects Findings 2 and 4. Based on the findings, the rule also states that the NRC has met its obligations under NEPA concerning the storage of spent fuel after reactor operation.

Finding 1 (reaffirmed): The Commission finds reasonable assurance that safe disposal of high-level radioactive waste and spent fuel in a mined geologic repository is technically feasible.

Finding 2 (updated): The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary.
Finding 3 (reaffirmed): The Commission finds reasonable assurance that high-level waste and spent fuel will be managed in a safe manner until sufficient repository capacity is available to assure the safe disposal of all high-level waste and spent fuel.

Finding 4 (updated): The Commission finds reasonable assurance that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 60 years beyond the licensed life of operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite independent spent fuel storage installations.

Finding 5 (reaffirmed): The Commission finds reasonable assurance that safe, independent onsite spent fuel storage or offsite spent fuel storage will be made available if such storage capacity is needed."

The 2010 NRC waste confidence rule was remanded by the Court of Appeals in 2012 primarily because the NRC's analysis leading to that rule did not evaluate the environmental effects of failing to secure permanent disposal. That failure is the direct result of the heads of the NRC and Department of Energy (DOE) taking steps to terminate the Yucca Mountain Repository despite the requirement to continue the program under Federal law in the Nuclear Waste Policy Act. In essence, the Court said that not ever having a geologic repository is a reasonable possibility that must be addressed in an EIS. Subsequent to the Court decision the NRC stated that it will not issue new reactor licenses, which are dependent upon a Waste Confidence finding, until the remand is addressed.

Thus our nation and NRC face a predicament in determining whether or not Waste Confidence can exist without a permanent repository. The subject EIS is an attempt to address this predicament and brings to mind an old saying - "Those who cannot learn from history are doomed to repeat it." Sen. Jeff Bingaman, D- N.M., and outgoing Chairman of the Senate Energy and Natural Resources Committee, has repeatedly

warned against short term fixes and said that without a permanent repository, an interim site becomes a de facto permanent site.

NWRPO's Detailed Comments

1. The five findings in the remanded Waste Confidence rule must all be addressed in the proposed EIS.

   - Finding 1 should clearly be affirmed based on the wealth of evidence in the DOE license application for Yucca Mountain and the NRC staff review material regarding that license application that shows a repository can be developed that is safe and environmentally acceptable. All relevant material developed by NRC and DOE related to Yucca Mountain should be utilized in the preparation of the proposed EIS.
   - Finding 2 regarding the Commission determination that a repository will be available "when necessary" is problematic based on this administration's recent decisions attempting to terminate the Yucca Mountain Program. The administration's actions compound an already tenuous situation; lawsuits have already found that the government is responsible for its failure to take the wastes for disposal in a repository as required by contracts put in place as a result of the Nuclear Waste Policy Act. Because the government is paying damages to the utilities for its failure to open the repository and take the wastes, arguably, "when necessary" is already past. The inclusion of a scenario regarding long-term (perhaps perpetual) continued storage in the event a repository is not available may be adequate to address this problem. However, it will require a fundamental change in the basis for the Commission's confidence. The confidence that used fuel can be safely stored until a repository is open must now address safe storage in perpetuity.
   - Finding 3 must include a similar fundamental change based on the length of time safe used fuel storage is necessary. The proposed EIS must include a reasonable basis for that confidence, if one exists.
   - Finding 4 regarding safe storage for at least 60 years after every reactor's operating life must be extended to much longer periods (perhaps forever) if no repository is assumed. In addition, the technical basis for the Commission's declaration of 60 years safe storage (or longer) should be incorporated in the proposed EIS. The current technical basis is lacking.
   - Finding 5 regarding safe onsite or offsite storage for very long times must be addressed in this finding as noted for findings 2 and 3.

   Except for finding 1, NRC's remanded waste confidence findings require modification if they are to have a reasonable basis. Obviously, having a requirement in Federal law to have a repository does not constitute an adequate basis as shown by recent NRC and DOE actions attempting to terminate the Yucca Mountain repository program. Further, the technical basis for safe, very long term storage must be sound. NRC previously announced a long term study program to provide a sound basis for its assumptions regarding the safety of long term storage including the storage and transportation of very old high burn-up fuel. Those studies should be adequately funded and accelerated if the proposed EIS is to have a reasonable basis for the long term storage scenarios.

2. Findings based on very long (perhaps perpetual) periods of safe and environmentally acceptable storage may be possible technically, if funding sources are ensured with perpetual funding provided concurrent with the use of nuclear generated electricity instead of assumed to be available from future generations. Any "no repository" scenario must address financing of perpetual storage including ongoing monitoring, maintenance, and repackaging. In addition the cost of payments to utilities for failure to accept spent fuel must be included in any analysis.

3. A scenario including a repository available at the middle of this century is unrealistic unless that repository is developed at Yucca Mountain. It is incredulous that NRC is not planning on consideration of a Yucca Mountain repository even though Yucca Mountain remains the law of the

land. If the writ of mandamus is issued by the United States Court of Appeals for the District of Columbia Circuit, lack of consideration of a Yucca Mountain repository is even more ludicrous. A Yucca Mountain scenario must be included.

4. Scenarios including development of Yucca Mountain, development of a different (or additional) repository at least 50 years into the future, development of indefinite long-term centralized storage, and development of perpetual long-term storage locations should be included. For very long-term storage scenarios, it is unclear what "reasonable" assumptions can be made about ongoing societal institutional controls. Generally speaking, the assumption of such controls beyond 100 years has not typically been included in EIS analyses. NRC should utilize the Yucca Mountain FEIS no-action analysis to inform what may happen without centralized storage – both assuming institutional controls and assuming no institutional controls after 100 years. Additionally, scenarios with each institutional control assumption should be made for centralized storage and repository scenarios. Of course, we already know that institutional controls with a repository are not necessary to ensure safe and environmentally acceptable disposal based on Yucca Mountain analysis results. Safe and environmentally acceptable storage should also be possible with continued institutional controls that include adequate funding. Without ongoing institutional controls, very long-term storage is problematic. However, it would be useful to compare storage scenarios that do not include institutional controls at existing used fuel locations versus centralized storage that is not adjacent to large water bodies such as oceans and our nation's rivers and lakes. Almost all of our nation's nuclear power reactors where used fuel is currently stored are in close proximity to primary sources of potable water.

5. To be thorough, transportation of used fuel packages of various sizes should be included in the proposed EIS. Also, transportation to a repository or central storage location at varying times into the future should be considered. Total vehicle miles for each scenario (or combination of scenarios) should be calculated and compared. The comparison should include direct shipment to a repository. Yucca Mountain analyses already performed should be used to the fullest extent practical.

6. The analysis should include repackaging requirements that will vary depending on repository and storage concepts. For instance, storage in transportation, aging, and disposal (TAD) containers as proposed for Yucca Mountain would have minimal impact and repackaging requirements before shipment. Other repository concepts will likely require smaller waste packages and therefore require extensive repackaging at current locations, central storage locations, and/or the repository sites.

7. Congress implemented the NWPA to ensure the people that created the nuclear waste problem deal with it and not defer to future generations because the problem, if left unattended, could become insurmountable. Only a permanent near term solution (on the order of decades) was deemed reasonable. At a minimum this EIS should include analyses of the effects of loss of institutional controls and the adverse safety and environmental impacts that could occur if a repository is permanently unavailable.

8. Current EPA and NRC risk informed repository regulations are not predicated on arguments that there will always be continuous improvement in our society's understanding and handling of radiation risk. Those regulations require that preclosure initiating events with a probability of one in ten thousand over the period of evaluation be considered for radioactive waste repositories. That would equate to events with an annual probability of between one and three million per year for an evaluation period of between 100 and 300 years before permanent disposal. For perpetual storage and repository scenarios, events with a probability of one in one hundred million per year, consistent with the most recent repository regulations, should be considered in this EIS analysis.

9. Perhaps a reasonable way to deal with the possibility of perpetual storage would be to require revisiting waste confidence every decade or so. In that manner, findings 100 years into the future could be reasonably made. If at any point waste confidence regarding safe and environmentally acceptable disposal and/or storage could not be reasonably projected for 100 years (or some other discrete time period), our nation would have 90 years left from the previous waste confidence decision to deal with the problem.

10. If NRC does not include scenarios with continued perpetual institutional controls as well as cessation of institutional controls at some discrete future time, criticism for not making reasonable and justifiable assumptions will be forthcoming. Even with scenarios including differing assumptions regarding institutional controls, NRC should expect opposing viewpoints from different parties.

11. It is recommended that this EIS process address the significant technical and institutional uncertainties and consequences if this nation continues to defer indefinitely developing a functional disposal capacity for high-level radioactive waste. Our country has been producing such waste from electric power reactors for over fifty years and Congress was confident it had addressed the social and political obstacles in a bi-partisan decision process with the Nuclear Waste Policy Act. Recent political actions, such as those that have recently stopped progress on the Yucca Mountain repository, demand that the EIS address these uncertainties and consequences.

12. Although this Administration does not wish to pursue the Yucca Mountain repository, this posture toward inaction does not relieve the NRC from evaluating the consequences of inaction and articulating the national need for action. This EIS must address the substantial and real consequences of political inaction.

13. A complete articulation of the societal uncertainties of the allocations of future resources to dispose of previous generations' wastes must be included in the proposed EIS. It is neither ethically nor morally appropriate to assume that future generations will want to spend their resources to indefinitely maintain and protect nuclear wastes created to produce electricity to benefit the current generation.

14. In response to the question asked by NRC staff at webinars related to the proposed EIS scoping, regional meetings should be held within 100 miles of every nuclear power reactor or used fuel storage site to allow the public near those sites to personally observe that such reactor and storage sites are in jeopardy of becoming de facto perpetual storage sites without a used fuel geologic repository.

Enclosed References:
Reference 1 - NWRPO, November 25, 2008 letter to the NRC regarding the "Update and Proposed Revision to the Waste Confidence Decision"

Reference 2 - NWRPO, February 16, 2012 submittal to the NRC staff regarding the NRC "Draft Report for Comment, Background and Preliminary Assumptions for and Environmental Impact Statement – Long-Term Waste Confidence Update, December 2011"

References Not Enclosed:
Reference 3 - Science Committee of the Sustainable Fuel Cycle Task Force, February 17, 2012 comments to the NRC staff regarding the NRC "Draft Report for Comment, Background and Preliminary Assumptions for and Environmental Impact Statement – Long-Term Waste Confidence Update, December 2011"

Reference 4 - NRC, Draft Report for Comment, Background and Preliminary Assumptions For an Environmental Impact Statement – Long-Term Waste Confidence Update, December 2011

Sincerely,

Lewis Darrell Lacy, Director
Nye County Nuclear Waste Repository Project Office